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CLINICAL LECTURES.

EMBOLISM IN HEART DISEASE.—PHTHISIS.—TYPHOID FEVER COMPLICATING PHTHISIS.—CARDIAC FAILURE IN MITRAL REGURGITATION.

BY THE LATE JAMES H. HUTCHINSON, M.D.[1]

Gentlemen: I will begin this morning's lecture by showing to you the specimens from the autopsy of the woman whom you will recollect I brought before you suffering from a disease of the heart with paralysis of the left side. You will recollect also that she had had, at various times, hemorrhages in different parts of her body. On admission there were small petechial spots upon her abdomen and chest, and an examination of her eyes revealed small retinal hemorrhages; while occasionally she had hemorrhages into her conjunctivæ. She also had a greatly enlarged spleen. It was, in fact, double the usual size. At that time I called your attention particularly to a loud, purring, musical murmur, heard best over the apex of the heart, and systolic in point of time, and therefore due to insufficiency of the mitral valve. Her condition on admission was very peculiar. She seemed somewhat dazed, and it was difficult to get a correct answer from her. She could not tell us her name or residence, and when asked if she knew where she was, replied "In the Pennsylvania Railroad" instead of "Hospital." Later, however, she regained her healthy condition as far as her mind was concerned. In August she was suddenly seized with a fainting attack, and on her recovery it was found that she was paralyzed on her left side. Taking into consideration the fact that she had this extensive disease of the heart, together with the existence of the hemorrhages over her body, I made the

[1] Delivered at the Pennsylvania Hospital.

diagnosis of embolism of the middle cerebral artery of the right side, and the autopsy has confirmed this opinion. Just before the close of her life there were symptoms which were possibly due to an embolism in some of the smaller vessels on the other side of her brain. It is also very possible that her dazed condition, on admission, was due to an embolism in a small arterial branch supplying the Island of Reil on the left side. She had what is called "amnesic aphasia," inability to remember the names of objects or places. As you will remember, the patient was emaciated and extremely anemic. Last week she died.

Embolism consists in the washing away of a clot or of a vegetation from the heart into the circulation, and its lodgment in some artery of the body. Of course, this embolus may get into some artery where it will do little or no harm, as in one of the arteries of the liver, where the collateral circulation is large. Then again it may lodge in the spleen, which is, in fact, the organ in which emboli are most frequently found. This shuts off the circulation from a portion of the organ, and a peculiar change takes place, called an *infarction*. If the embolus is carried into an artery of the brain it is followed by still more serious results. The circulation of a portion of the brain is shut off, and symptoms are produced closely resembling those produced by an effusion of blood. We may have in the beginning, however, symptoms of excitement. If the artery is large, we will have paralysis which may take place suddenly or gradually. If the embolus does not entirely occlude the artery, there will be a certain amount of circulation still carried on, and the functions of the brain continued imperfectly, but sooner or later the clot which forms around this embolus will entirely occlude the artery and the paralysis becomes complete. If, on the other hand, the artery is completely occluded, the loss of power will be sudden. Other arteries besides those just alluded to are often affected. The first case of embolism I ever had under my care was one of the iliac artery in which gangrene of the foot followed and eventually caused the patient's death.

I show you here in the spleen of this woman an example of infarction which I have described to you. It does not show as clearly to-day as it did at first. You see this triangular patch, different in color from the surrounding parts. It has begun to break down. Here is another not so soft. No doubt if I were to cut into the other parts of the organ I would find still others. The same condition will take place in the kidney, but never in the liver, because of the peculiarities in the circulation of that organ. I now show you the heart which was the cause of all this trouble. Here is the mitral valve covered with numerous vegetations, many of which have but slight attachments to the valve. We seldom see a valve so completely covered with vegetation. There are also a few here on the aortic valve, which probably give rise to slight degree of obstruction of the aortic orifice, and consequently to a slight murmur which was marked by the louder mitral murmur. It is a question whether this dense vegetation is the result of an ulcerative endocarditis, but my colleague, Dr. Longstreth, the pathologist of the hospital, thinks not. The brain on the side where the obstructed artery was is very much softened. The middle central artery on this right side is occluded, and is little more than a fibrous cord. If the embolism had been on the left side of the brain, the woman would have had aphasia, in addition to the other symptoms. This patient before the occurrence of the embolism of the brain, had an attack of fainting, and it is possible that a small clot formed in her heart during this time which was washed out, producing the occlusion, but I think that it was more probably due to a piece of vegetation.

Phthisis.

I wish also to show you some specimens from a case of phthisis. The patient, who was a colored woman, was brought into the hospital in an almost moribund condition, but under the administration of stimulants reacted and lived for over three weeks. Both lungs are extensively diseased and riddled with abscesses, so that there is very little lung tissue left. She died of hemorrhage which was considerable in amount, and you can see here the vessels running across this cavity of the rupture, which probably gave rise to it. There are cavities at both apices, and during life there was here marked gurgling, amphoric respiration, and the peculiar sound known as the "cracked-pot" sound, produced by the blow upon the chest causing a sudden expulsion of air from the cavity. The sound is best heard when the mouth is open. It is most easily produced when the cavity is superficial and the chest-walls thin.

In pneumonia of the apex occurring in young people we can sometimes produce it, but it is never heard in adults without the presence of cavities. In the sputum of this patient were found elastic tissue and bacilli. The kidneys are large, the heart normal.

Typhoid Fever Complicating Phthisis.

I will now bring before you a young girl to show you certain physical symptoms which exist, indicating a certain amount of affection of the lungs. The patient is 22 years old, single, a box-maker by trade, and was admitted on the thirteenth of August. She had been ill for some time before this, and was supposed to have incipient phthisis. During her stay in the house she had a considerable rise of temperature, and with this had one or two rose-colored spots on her abdomen together with ochre-yellow stools. In examining the temperature sheet we find two very decided rises of temperature since her admission. The first occurred very shortly after her admission, and for two weeks we see but a slight intermission in this fever. It was followed then by a period of complete apyrexia, with occasionally a subnormal temperature. Towards the close of the fourth week the temperature rose again decidedly and rapidly and continued high for some time, when it gradually declined. With this chart, and the history of spots and some tendency to diarrhœa, I have no hesitation in saying that the patient has had an attack of typhoid fever followed by a relapse. Since then she has had an irregular temperature up to the present. It is now a very little above normal. The physical signs now present were present when she was admitted. The typhoid fever, then, is a complication of the phthisis, and not the phthisis a sequel of the fever. There is no very great activity in the disease at present. There is no very marked symptom on inspection, no falling in of the chest on either side. On full inspiration there is a little more movement on the right side than on the left. The vocal fremitus is more marked on the right side than on the left, but this is normal. On percussion there is a marked difference between the two sides, there being dulness at the left apex. Immediate percussion shows an entire absence of resonance under the left clavicle. This is also noticed posteriorly, though less markedly. On auscultating her chest I find well-marked gurgling due to the breaking of bubbles in a cavity. The character of this bubbling depends upon the size of the cavity; if this is large, there is coarse bubbling; if small, very fine bubbling. This cavity is not very small. In addition to the gurgling we have also a certain amount of cavernous respiration due to the movement of the air in a cavity. Cavernous and bronchial respirations have certain points of resemblance, but in bronchial respiration the expiratory sound is higher in pitch than the respiratory, while the reverse of this is true of cavernous respiration. This is a very important difference. There is cavernous resonance also under the left clavicle. In some cases we have pectorilogny, but this is not present in this patient. There has been here a certain amount of breaking down of the left lung and apex, but there is reason to believe that the condition is not active at the present time, as she is improving in strength, health, and weight, having gained six pounds in the last month.

The treatment here should be a nourishing diet, with remedies to build her up. Three examinations of her sputum have not revealed bacilli, though fibrous tissue has been found. The point of special interest in the case is the proof of our power of recognizing the pre-existence of typhoid fever from a study of the temperature chart. The chart is not typical, but we have certain characteristics always found in typhoid fever: the primary rise in the first week followed by a period of high temperature, and this by a period of decline, and finally by a period of subnormal temperature, especially in the morning.

Cardiac Failure in Mitral Regurgitation.

We had brought into the house a few days ago, a woman in a condition of extreme cardiac failure. She is a Russian, and we cannot get from her any history of value. When brought in she was exceedingly depressed, gasping for breath, with cyanosis of her lips, nails, and tip of nose, in fact, in a condition of almost arrested action of the heart. On examining her further we found a very distinct mitral murmur, best heard at the apex, harsh in quality, and therefore indicating mitral regurgitation. No enlargement of the heart could be discovered, but there was a certain amount of emphysema which marked the area of cardiac dulness interfering with our examination. Her chest was full of mucous râles, and there

was a drawing in of the base of the chest on full inspiration, the result of over-action of the diaphragm in her efforts to breathe. The resonance was clear, the movements of the chest diminished. Her temperature has been sub-normal with one exception since her admission. This is apt to be seen in cases of so great depression. The examination of the urine was negative. To-day there is a slight blue tinge of her cheeks and nose. She spits up a large amount of mucus or muco-purulent material, but this is diminishing gradually. I do not believe that it contains either bacilli or fibrous tissue. On examining the chest, we find that in spite of this bronchitis the resonance is normal. The other day there was a slight degree of dulness at the left apex, indicating a slight congestion there, but there is no pneumonia or organic change there.

These symptoms demand very active treatment. The patient is suffering with orthopnœa. Her lung condition is an effusion into the bronchial tubes, rather than a true bronchitis. The first thing to do in such cases is to produce active revulsion, and the best way to do this is to apply dry cups all over the chest. Turpentine may be applied very vigorously by wringing a flannel out of hot water and sprinkling the turpentine liberally over it. If this is not at hand, a hot poultice may be used, or heat applied in some way. In addition, digitalis should be administered very freely, ten drops every hour, if you can remain with the patient, until an effect is produced. With this may be used carbonate of ammonia, which is an active expectorant, as well as a stimulant. No doubt this patient has had a disease of her heart for some time, and as a result it has become weakened, and under the additional strain of a small amount of bronchitis it has given out. She will recover from this condition, and as soon as she is able we shall endeavor to improve her general condition by giving her cod-liver oil, iron, malt, and other nutritive remedies.

IODINE IN SEAWEEDS.—*Fucus vesiculosus* has been examined by L. van Italie with the view of ascertaining how much iodine the plant contains and in what form it exists (*Arch. d. Phar.*). He found the percentage of iodine to be 0.0113, and that it exists as an iodide. The plant was examined for bromine without definite result.

GREEN-STICK FRACTURE OF FOREARM.—GUN-SHOT WOUND OF ELBOW.—COMPOUND FRACTURE OF OLECRANON.—NON-PENETRATING PISTOL-SHOT WOUND OF ABDOMEN.—BURSITIS OF KNEE.—FRACTURE OF BONES OF LEG.—NECROSIS OF CARPUS.—HEMORRHOIDS.[1]

BY JOHN H. PACKARD, M. D.,

VISITING SURGEON TO THE PENNSYLVANIA HOSPITAL, ETC.

Green-Stick Fracture of Forearm.

Gentlemen: To-day I bring before you, first, a very interesting case of green-stick fracture of the forearm, in a child, fourteen months old, who had a fall from a table three weeks ago. It was not detected, however, until a week and a half after the accident. The child has been under treatment, but the arm is not entirely straight yet. There is a slight bowing of the arm, and some callus has been deposited here. The deformity is not apparent upon the radial side of the arm, but is quite distinct on the ulnar side. I shall use this piece of binder's board to make a suitable splint. I bend up the edge of the board so as to make a complete support for the ulnar side of the forearm; then pad it thoroughly to prevent any irritation of the skin, making the mass of cotton perfectly even and uniform. This, you see, will prevent any excoriation. I have here a wooden splint upon which I shall depend for the maintenance at rest of the entire limb. It is not properly finished, and I must alter it. Were the arm placed upon it as it is, the edges of this perforation for the epitrochlea, being sharp, might cause serious irritation, or even excoriation. I carefully round this edge off and also all of the other edges and corners of the splint. This, I think, is of special importance in the case of a restless child. In straightening this arm, which you see I can do with ease even after three weeks, I apply first this binder's board splint, and then the inner splint, securing them with a suitably narrow bandage somewhat firmly applied. I have purposely made the dorsal splint slightly narrower than the forearm, in order

[1] Delivered at the Pennsylvania Hospital.

to bring the pressure upon the ulnar margin. This case should interest you, because it is only rarely that one has the opportunity of seeing these green-stick fractures.

Resection of Elbow-Joint for Gun-Shot Wound.

I shall dress this young man's arm before you again to-day, to show you the course of the case. You remember that he had the entire outer side of his elbow carried away by the discharge of a gun close to him. The condyle and epicondyle of the humerus were shot off as well as the outer edge of the head of the radius; and there was much loss of skin, but the vessels were not injured. I excised the joint two weeks and a half ago, so that to-day is the seventeenth day since the operation. Even after the excision of the bone, there was some difficulty experienced in bringing the edges of the skin together, so much of it having been destroyed at the time of the injury. You see that he is able to move his fingers and his elbow-joint to a certain degree. The wound has been dressed as usual, with iodoform and iodoform gauze; the arm has been kept in a splint, not because I desire to keep the joint still—to stiffen it, as in the case of a knee, but to afford protection from any accidental violence until the healing of the wound is complete. I replace the splint, therefore, simply as a matter of precaution.

Compound Fracture of Olecranon.

I will now show you another case of injury of the elbow in which I operated about eight days ago. It is a case of great interest: a separation of the olecranon process of the ulna by a blow from a shovel. It was, in fact, a compound fracture, the edge of the shovel striking the elbow and cutting the olecranon off. I sutured first the process to the ulna, and then sutured the surrounding fibrous tissue. I cannot take any liberties with the arm to-day, but there is every reason to believe that union is taking place, and that the man will have a good joint. He has been sitting up to-day, but has hitherto been kept in a recumbent position. The wound is entirely healed, and there is some little motion in the joint, but we cannot flex the arm for fear of putting too great a strain on the sutures. The resident will replace the dressing in the ward, while I show to you this next case.

Pistol-Shot Wound of Abdomen.

This case is one of a pistol-shot wound of the abdomen, the ball lodging in the abdominal wall, which in this man is provided with a thick layer of fat, and prevented a penetration. He says that the ball gives him pain at a certain point, and desires to have it removed. If it was not a source of actual annoyance, I should let it alone. In making the incision in the skin over the supposed site of the ball, I do it obliquely. In this way I can keep the edges in better apposition than if I cut directly down, and thus shall secure healing without any scar. The ball entered a little to the right and below the umbilicus, and to the left of this there is a hard swelling; over this spot he complains of pain on pressure. I now explore the incision I have made, but am not able to discover the ball. It sometimes happens that a ball has traveled further than is suspected. This ball is said to have been a very large one, 32 calibre, and it is rather surprising that it should not have been more readily traceable, either now or at the time of injury. I shall not undertake to dissect in search of the ball, without a clue to guide me. The tenderness on pressure here is simply that which accompanies the inflammatory induration. There is no danger of damage to the peritoneum in what I have now done, because of the amount of fat upon the abdomen. The ball is nowhere in the range of the wound, but has probably lodged in the abdominal wall some distance from this point, and I shall simply introduce drainage and close the wound. To do this I enlarge the original wound a little and insert a catgut drain through both wounds. I wish to call your attention to a popular error,—the belief that it is of great importance that a bullet should be found and extracted. Very often, by the time the ball has reached a lodgment, it has done all the damage it is likely to do. Its mere presence is of no moment unless it is in a position where it cannot remain quietly. The patient and his friends are always encouraged if they can see the ball after it is taken out, because they think its removal means greater safety.

Bursitis of Knee.

Two weeks ago I brought before you this man with an inflammation and swelling in the neighborhood of the right knee-joint. I then considered the question, whether the inflammation was within the joint or outside

of it. A day or two later I freely opened the swelling and let out a very large quantity of pus. I made drainage through the popliteal space, and a counter-opening in the opposite side of the joint. To-day I bring him before you to show you the great improvement in his condition. You remember he was suffering greatly. His temperature before the operation was 103°; after the operation 101°. It then fell to 98½° and since then has only been a trifle over 99° on two or three occasions. You see the opening here below for drainage, the opening I made into the swelling, and the opening on the other side to permit free drainage. The patella is now quite down upon the end of the femur. There is no suppuration to-day, and I shall simply put on a dry dressing. In a few days I shall let the man get up and attempt to walk. He has perfectly free motion in his joint. I want to show you the splint I used, which was very convenient, and easily made. It is simply a piece of tough binders' board, and rude in appearance, but by means of cotton it can be made to fit any limb. It is as good as the Day splint, and better than the McIntyre splint used abroad. If I had not opened this swelling, the inflammation might have extended into the joint and given rise to serious damage.

Fracture of Bones of Leg.

The case now before you is one of injury close to the knee-joint. The patient is a woman, 67 years old, who was run over three or four days ago by a wagon, and brought into the hospital with her limb in the bruised condition you see. On examining the limb, as I steady the femur above and grasp the leg below, I can sway the limb from side to side. You will remember that in a healthy knee you can have no lateral motion. Here we have either a damaged joint or damaged bones. As I examine more closely I find that there is a fracture of the tibia extending into the joint, and a fracture of the fibula a little below its head. The importance of this injury is very great. I will apply a splint externally along the whole limb to keep the joint perfectly at rest. These cases of fracture of the leg close to the knee-joint are very rare. In a child, it must be remembered that lateral mobility may be due to damage to the bones just above the knee, as well as just below, from a separation of the epiphysis of the femur. You can differentiate these cases by a most careful examination to ascertain the point at which the motion takes place.

Necrosis of Carpus.

This woman came into the hospital, saying that she had sprained her wrist four weeks ago. As you see she has had a cellulitis here, and free incisions have been made in the back of her hand to relieve this. You can see when she endeavors to move her hand, that the movements are jerky, with no steadiness whatever. As I move her hand in this way I feel a slight grating beneath my fingers, and I know I could, with but little trouble, displace this wrist-joint. With my thumb and finger over the joint, a sense of looseness of the carpal bones is appreciable, and I can feel them moving distinctly on each other. I think there is dead bone here, perhaps involving the whole of the carpus. I am not at all prepared to say that this woman had simply a sprain of the wrist, but she has in some way damaged the periosteum to such an extent that the bones have lost their life. The hand will never be of any use and the best thing to do would be to remove it, but I shall wait till she herself sees the wisdom of this and asks to have it done.

Hemorrhoids.

Here is a case of hemorrhoids upon which I will operate by means of the clamp and cautery. The subject is a man, 64 years old, who has suffered with these piles for twenty years. I have explained and shown you several different operations for hemorrhoids; excision for the external, ligation for the purely internal, ecraseur for those which combine both varieties. In this case we have two piles, one wholly external, the other partly external and partly internal; as the man's condition is perfectly good, and there is no local inflammation, I am going to use the clamp and cautery. By so doing I expect to get a more rapid and easy cure than by either of the other methods. The blades of this clamp are covered with ivory to protect the tissues. This is placed next to the skin, and the pile firmly clamped. I snip off the hemorrhoids with a pair of curved scissors, and then touch the surface with the cautery at a black heat. Then loosening the clamp I touch up any bleeding point with the cautery. The patient lies upon his left side with the right knee drawn up, giving me complete access to the parts. An iodoform dressing is applied, and a pad of sublimate cotton, with a T bandage.

COMMUNICATIONS.

THE TREATMENT OF RHEUMATISM.[1]

BY ELMORE S. PETTYJOHN, M. D.,

CHICAGO, ILL.

Few diseases have had so many recommended remedies and vaunted specifics for their alleviation as rheumatism. Nevertheless, there are certain well-recognized principles of treatment directly applicable in this disease. The treatment differs in the acute and chronic forms of the disease only in degree and detail. The former we are now to consider.

It is plain that we must alleviate pain, reduce temperature; open the emunctories of the system, rid it of the *materies morbi* that it contains as partly the cause, partly the result of the systemic disturbance. The patient's room should be large, well aired, and one where the sunshine is a daily visitor. The air should be at an even temperature of 70° F. Two beds should be used, one during the day and the other during the night. No linen should touch the skin, and the patient should wear flannel or woolen undergarments night and day, during and always subsequent to an attack. Absolute rest of mind, body, and eyes should be enjoined. Affected joints should be enveloped in wool kept in position by a slight bandage. If not greatly swollen a plaster of Paris bandage should be applied, the limb elevated, and the joints immobilized. Opiate lotions, evaporation being prevented by oiled silk, are to be used when the capsular ligament of the joint resists expansion and the plaster bandage is not used. Blistering, bleeding, leeching, and cupping, as practiced by Sydenham, are replaced by general remedies indicated, combined with antiseptic alteratives, laxatives, diuretics, and tonics. The diet should consist of liquid food and custards, lemonade, citrate of potassium in solution, and other acid and cooling drinks may be given along with an abundance of water, effervescing waters and milk. In extreme hyperpyrexia, uncontrolled by moderate doses of drugs, the cold bath, in which the water is cooled rapidly but gradually down from 94° F. to 68° F., should be used; its effects being watched carefully. The warm bath should be used daily for 20 minutes during convalescence, except in asthenic cases, when it should not be continued so long nor used so frequently.

Without discussing the chemical reactions and the therapeutic rationale of modern remedies used, we desire to note the clinical results, so near as ascertainable, of a few of the more valuable drugs used in the treatment of this disease. Antipyrin, according to Sée, Guttman, and Stezeninski, in doses of from four to six grains per day and continued for a week or ten days, produces beneficial and satisfactory results. They hold that it is found efficacious where antifebrin and the compounds of salicylic acid have apparently failed. Its use, they say, reduces temperature, alleviates pain, and prevents implication of the cardiac membranes, without producing any of the unpleasant effects caused by salicylates. The beneficial results obtained by the drug in these cases are stated to be 41.8 per cent. Fowler's solution in 5-drop doses gradually increased, according to tolerance, and then reduced to one-half of the last dose given, and continued for several weeks or months, as in chorea, seems to have produced excellent results in mild non-febrile cases. Cascara sagrada has been extolled by Dr. Goodwin and others, given in 15 to 20 minim doses every four hours. No attempt has been successful in explaining its action. The salicylate compounds being among the most powerful antiseptics known, I believe, on this account, to be the sovereign remedies in the treatment of rheumatism. These should be used along with laxatives, alteratives, stomachics, tonics, eliminants, and proper attention to general rational indications. To Maclagan, Stricker, and Riess we owe credit for bringing this remedy to the notice of the profession. Salicin produces many similar effects to those of quinia.

In an acute case the treatment with salicylate of sodium or salicin should be commenced by giving 20 grains of the drug in elixir or lemonade every two hours for the first twelve hours, or until *tinnitus aurium* is produced. The same dose is to be continued every three hours for the next twelve hours, and thereafter for four or five days the same amount is to be given every four hours. The regulation of the amount given is to be determined by the abatement of the symptoms—*i. e.*, the reduction of temperature, the relief of pain, and the depression of the heart's action. The most frequent

[1] Read before the Chicago Pathological Society, Nov. 11, 1889.

cause of failure in the use of this remedy is in not giving a sufficient quantity at each dose or not repeating the amount frequently enough. Whenever the symptoms begin to subside the amount or the frequency or both should be diminished to the point of saturation, but the remedy should be administered for at least two weeks in every case. I have found good results within the first forty-eight hours, and the more acute the case the more effective the result of the remedy. In treating 160 cases I have not found any who have not obtained benefit, and 60 per cent. of the primary acute cases have been entirely relieved. I believe the heart and brain complications sustain the same relation to the schizomycete, or the blood changes produced by its presence, along with the local inflammation, as does the joint affection. I have not noted heart or brain mischief, where the salicylic treatment has been used from the beginning, and there was no previous heart lesion; only later on, where the salicin had not been used until inflammation had already occurred in the cardiac membranes, upon which the salicin itself has no direct effect. But to cure the rheumatism is not to cure the heart lesion, for the effect may remain after the cause is removed. The appropriate treatment of the rheumatism at its inception ought to prevent the heart from becoming affected. After it is once affected, however, relief is only obtained in the same way as if the inflammation had arisen from other causes. The same is true of inflammation of the dura mater. I speak of these because I believe the only immediate or remote danger to life in cases of rheumatism to be in the implication of these organs.

After the more acute symptoms have subsided quinia, cod-liver oil, iron, Fowler's solution and the iodides should be administered for weeks and even months as the inflamed textures do not recover their tonicity as soon as the inflammation ceases. The administration of salicyl compounds arrests the course of this disease chiefly by their antiseptic action, destroying or rendering inert the schizomycete concerned in its production. They also have an acid and diuretic effect. They reduce the temperature by removing the source of the inflammation by which the temperature is produced, and thus relieve tension and pain simultaneously. They thus arrest the course of the disease by removing its cause. By the elimination of the *materies morbi* through the emunctories of the system, accomplished by the use of our ordinary remedies, we have the system again restored to its normal state, save the effect of the attack upon it of the specific schizomycete which has produced the malady, and possibly the retention of some of the microbes for future ravages whenever the condition of the system becomes favorable for their multiplication and renewed activity.

I quote briefly two cases from my notes in illustration. The first a severe acute rheumatism.

Case I. I was called early in the morning of November 6, 1887, in consultation by the family, with Dr. Louis Braun, to see T. J. E., a man 32 years old, who had been sick in bed a week and was thought to be growing rapidly worse. The patient had not slept, except by use of opiates, for four nights, and with hypnotics only a few minutes at a time. He was very pale, with an anxious expression of the face. The pulse was 120, weak and irregular, the respiration was somewhat labored, 26 per minute; the temperature was 103° F. He was bathed in perspiration, which had been so profuse as to saturate bedding, requiring it to be changed twice daily. The patient had vomited everything he had taken for the last twenty-four hours. The effort of vomiting had exhausted him, increased the prostration, and made the pain so much greater in the swollen, tender joints that he now absolutely refused to take food or medicine. He complained of pain in the cardiac region, with oppression and difficulty of breathing. On examination of the heart a mitral systolic murmur was heard that had not before appeared. The urine was scanty and high colored, though micturition had been frequent. The bowels were constipated, and had been during the attack. The patient was placed between blankets and ordered an aperient, some buttermilk or kumyss, mutton broth, a tepid alcohol bath, and 20 grains of salicylate of soda in lemonade every two hours for 12 hours. After that, the same amount of salicylate every third hour for 12 hours. Being seen again the next morning, it was learned that the patient had vomited but once, but complained of nausea after the medicine had been taken. He had slept during the night twice, two hours each time. The joints were free from pain except when moved. The perspiration was less abundant, the pulse 95, and the temperature 99.8° F. He had retained nourishment and said he

felt better in every way. He was ordered 15 grains of salicin every three hours for the next day, and every four hours thereafter. He made a good recovery during the next three weeks. I believe it was the salicylate that so promptly relieved the acute symptoms and in the manner above indicated.

Case II. I was called to see Mrs. H. S., 24 years old. She had been vomiting bile for several days and was suffering from dysentery. She complained of general malaise, aching in the bones, with a desire to gape and stretch constantly. She had a chilly sensation with shivering every afternoon, when she could not get warm by external heat, followed by burning heat and perspiration. During the forenoon of each day she complained of dull aching pains shifting from shoulders to ankles and wrists and knees. The pain was more severe when the weather was cloudy or rainy or damp. The joints were tender on pressure, and exercise increased the pain and tenderness. This condition, with the exception of dysentery and emesis, she had complained of for the previous three weeks, during which time she had been driving through Southern Kansas and was out of doors most of every day. She thought that she had taken cold and was using tonic doses of quinine with laxatives, but was growing worse daily. The tongue was covered with a thick creamy coat. The pulse was 100; the temperature normal in the morning, but at 6 P. M. 100° F.; the latter time when she complained the most of feeling feverish, and two hours after of chilly sensations. The urine was scanty, high colored, and loaded with urates. The heart sounds were normal. The patient was in bed. The mother had acute rheumatism before the patient was born and since, but the patient had never, to her knowledge, had an attack of the disease. I directed her to lie as quietly as possible in bed, and ordered elixir of salicylate of soda, one tablespoonful (30 grains) every two hours for the first entire day except during sleep. When seen the next day it was found that she had taken 8 doses of the salicylate (240 grains), and was free from pain in the joints, but depressed from the action of the remedy. She had suffered from the chilly sensation as the day before and was in a fever, the temperature being 101° F., a degree higher than the day before. I ordered the salicylate continued until the next morning at 7, and commenced again in the afternoon at 5. I also directed quinine in 10-grain doses to be given at 8.30 and 11.30 A. M., and 2.30 P. M. The next day the patient had no chill or fever, the dysentery was better, and she was feeling more comfortably than for several weeks. The quinine was stopped after two days' administration. Salicin was given in 20-grain doses every four hours for the first week and the same amount three times daily for a month after. The patient made a slow recovery in four weeks, but has had no recurrence of either disease. The quinine relieved the malarial symptoms which the salicylate did not. The salicylate relieved the rheumatism which the quinine did not mitigate.

Such cases of acute rheumatism, mild in form, complicated with malaria, are of frequent occurrence. The immediate beneficial effects of the salicylate are not so marked in all cases as in those cited. In the latter case I believe neither remedy would have given the patient relief, owing to the existence in her system at the same time of the schzomycete both of malaria and rheumatism. While there are analogies existing in the manifestation of the malarial and rheumatic micro-organisms, I believe they are as distinct from each other as the bacillus of anthrax and phthisis, and that while we are not able to determine absolutely the manner in which the salicylic compounds counteract rheumatism, or how quinine relieves malaria, we do know, by clinical observation and results, that their effects are highly satisfactory and remedial.

CHROMIDROSIS.

BY J. J. DALY, M. D.,
NEWARK, N. J.

Chromidrosis is a disorder of the sweat glands, in which the fluid poured forth varies in color, in some instances being yellow, black, blue, brown, or bloody. In the majority of cases the coloring is bluish or bluish black. In recent years the occurrence of a brick-dust red deposit on the skin has been reported in connection with the discoloration. The brown discoloration being the one I have met with I shall therefore confine my remarks chiefly to that variety.

The commonest situation for the occurrence of the dark discoloration is on the lower eyelids, but it may occur on any

part of the body, as the forehead, cheek, abdomen, limbs, back, and rarely on the back of the hands. Eichhorst says: "It never occurs on the back of the body," but in one of the cases I report it was the worst on the back.

There have been only a few cases of the disease reported as having occurred in men, and in some of these the scrotum was the only part affected. The disease is said, by some authorities, to be most common in women of about twenty-two years of age, and is twice as frequent in unmarried as in married women. It is often preceded by uterine disturbances, symptoms of hysteria, chloremia and anemia, and their accompanying nervous complications. It is occasionally feigned by hysterical simulators. To guard against deceptions, Spring recommends the following procedure: The spot to be examined should be carefully cleansed with oil, or, if necessary, by scraping, painted over with collodion, and allowed to remain for a few days. When chromidrosis is actually present it will show itself when the pellicle is lifted off.

The affection occurs as frequently in winter as in summer. The duration of the disease is not limited; in some cases it is said to have lasted for years, in others it has disappeared, only to return after a longer or shorter interval. It shows itself either in a small circumscribed spot or over a larger surface. Sometimes it manifests itself by a fine dust-like deposit, in others by only discoloration of the epidermis. This discoloration of the skin in most cases can only be removed by scraping.

The immediate cause of the change of color is not accurately known. By some it is thought to be due (especially the darker varieties) to the presence of indican in the sweat. Foote believes the color is due to the oxidation of hematin, but chromidrosis is looked upon as a product of the sweat glands, associated with some nervous influence.

The cases which I have knowledge of are the children of Mrs. C., of Metuchen, N. J., who has given birth to four children, and is of a very nervous temperament. The mother noticed that the first child, a girl, was very dark soon after birth; this was particularly noticeable as the child had red hair. This dark color gradually wore away after the lapse of a few months. The second child was a boy. A few weeks after birth the mother noticed a green streak about one inch wide around the upper part of the infant's neck. She supposed it was due to carelessness on the part of the nurse in washing the child. But with all the washing she could do herself, it would not change the color. This color gradually disappeared several months afterward. This child was, and still is, very nervous. Soon after birth of the third child, a girl, the mother noticed a dark spot about one and one-half inches in diameter in the palm of each of her own hands. She could not remove these spots by any amount of washing and scouring, but after a few weeks they disappeared suddenly. About this time the mother noticed that the child's feet were (as she said) dirty, and supposed the nurse had not washed the child properly, but washing did not remove the so-called dirt. Then the nails and the flesh beneath turned a dark color which gradually spread all over the body. The shirts, stockings, and all the clothing that touched the child's skin were stained about the color of a walnut stain. This coloring was darkest on the back. The child had profuse perspirations, which stained the pillow cases. The child was very poorly nourished. She is now about three years of age, and it still very nervous. The chromidrosis in this child suddenly disappeared when she was about seven months old. At times while suffering from the affection the infant's napkins would be stained red by the urine, and feces made dark spots. This stain, as well as the stain from the body on the shirts, etc., could not be removed by boiling and washing.

Fourth child is also a girl. The dark spots in this case first appeared on left leg below the knee, and on the left side of the face in spots, the largest being situated about one-half inch above and one inch external to the outer edge of the eye. The disease in this child, after spreading nearly over the entire surface of the left side of the body, disappeared in a few months. The color of the urine still remains dark and stains her clothing. This child, notwithstanding the very best of care, is very poorly nourished and nervous. At the present, no signs of the disease is manifest in the children, but the perspiration of the different children sometimes stains the pillow cases a dark color, although no discoloration of the skin can be seen.

The third and fourth child have suffered from marasmus. The mother is very thin, anemic, and of a decided neurotic disposi-

tion. No members of the mother's or father's family have ever been affected by the disease, nor have they ever known of any one else.

The treatment pursued in the above cases was such as would be calculated to build up the system, viz., cod-liver oil, tonics, peptonized milk, fresh air, etc., together with an oiling of the body all over at night and washing it with salt and alcohol the next morning.

CREMATION.

WHAT IS THOUGHT OF IT BY PHYSICIANS.

INTERVIEWS WITH PHYSICIANS BY A REPRESENTATIVE OF THE MEDICAL AND SURGICAL REPORTER.

SEVENTH SERIES.—CHICAGO.

DR. S. WICKERSHAM, the Health Commissioner of Chicago, says: It makes no difference to the dead whether they are buried in the ground, or their bodies are burned. It is an inevitable law of nature that organized matter will return to dust. As to the living, the percentage of Chicagoans that favor cremation is very small. They seem to be horrified with the idea that their individual bodies, or those of their relatives, should be disposed of in a crematory. While this subject has been before the more intelligent classes of people for many years, it does not seem to have obtained many converts. To ninety-five per cent., at least, of our people, the idea is very revolting. Now, what hygienic measures may be required when the population becomes very much larger than it is at present remains to be seen, but I do not believe that in this generation the idea will become sufficiently popularized to justify capitalists in investing their money in crematories, or that public sentiment will induce humanitarians to do so.

DR. N. SENN, of Milwaukee, Wis., says: Personally I am averse to cremation; from a sanitarian standpoint it is certainly the ideal method of disposing of the dead.

DR. HENRY M. LYMAN, of Chicago, says cremation is a good thing.

DR. JAMES NEVINS HYDE declares: In my view cremation is both proper and desirable for the bodies of the human dead. My convictions in full are those held by my friend and esteemed colleague, Dr. W. W. Keen, of Philadelphia, Pa.

DR. G. FRANK LYDSTON says: I have long been a convert to the view that cremation is the most philosophical method of disposing of the dead, both as a matter of economy of space and for the removal of what I believe to be one of the most important factors, under certain circumstances, in the propagation of disease. It is certainly unjust that the remains of the dead should be allowed in any way to disturb the comfort and health of the living. It must be acknowledged that the time is far distant when economy of space will be of as great importance in this country as in the overcrowded countries of Europe, but it has none the less already assumed sufficient importance to require serious consideration. In Chicago, for example, it is within the recollection of even the younger generation of citizens that cemeteries which have been considered to be well out of the way of the encroachments of city growth have required removal, at great expense and with many attendant offenses against esthetics. Even at the present time the space occupied by our cemeteries is so valuable that the question of removal ought to be considered very seriously. There are no objections that can be urged against cremation other than those of an esthetic character. There are many arguments in its favor. The only substitute for it is, in my opinion, the recently projected mausoleum method of disposal of the dead. This offers all the advantages of esthetics and economy of space.

DR. HENRY T. BYFORD says: I consider the transfer of burying-grounds for churchyards to outlying districts to have been a great advance in sanitary science and ethical culture, and think the day not far distant when similar advances will bring us around to cremation as the most sanitary, ethical, and satisfactory means of disposing of the dead. It is about as disgusting to think of our departed friends rotting in the ground as to know them to be devoured by carrion-eating vultures. Since nature demands the consumption of our worn-out bodies, let it be her most cleanly and complete method, viz., *fire*.

DR. ARCHIBALD CHURCH says: If it were a question of suitable and hygienic disposal of the bodies of lower animals dying from

natural causes the pre-eminent superiority of incineration would not be questioned. The only obstacle to the adoption of this method in the treatment of the human dead is purely sentimental, while every consideration of public health and cleanliness in its broadest sense is in favor of cremation. The privilege was accorded me of witnessing a cremation in Milan, and I feel sure that the most sensitive fastidiousness would not have been shocked in the least by the ceremonial, which has so much to commend it to the reason of every one. Aside from the possibility of destroying medico-legal evidence in cases of violent death, there is not a single well-founded objection to incineration; and under suitable precautions this has also but little weight. Personally I am emphatically in favor of the process of cremation as a general method in the disposal of the dead, and trust the growing sentiment in this direction may soon work a needed advance in one of the most important questions of public health.

Dr. A. E. Hoadley says: I can see no good reasons for urging cremation from a sanitary point of view; for I do not believe that pathogenic germs ever escape from the ordinary grave, and the inorganic elements as they very slowly, if at all, find their way to the atmosphere, are innocuous; or I know of no evidence to the contrary. And then, again, it does not contemplate a more speedy removal of the dead from the living. On the other hand, cremation may be urged on the ground of economy in time, space, and money, all of which are very important in the end of the nineteenth century. Sentiment in the matter amounts to nothing; for in a few years I think cremation will be the more popular method, and ultimately it will be a horrible thought to the sensitive to be buried in the cold dark grave.

Dr. Norman Bridge says: This subject has been so much discussed of late that nothing that I could say would amount to much more than a personal opinion. There are arguments in favor of and against cremation. It comforts some people to believe that they are to be cremated, that the bodies of their friends are to be cremated; to others the idea is shocking. The vast majority of people, for the next century at least, will certainly not believe in nor practice it. To them the idea of the common burial of the dead will be more comforting and more appropriate. From a sanitary standpoint, if cremation could be properly done, particularly in large cities, perhaps it would be better if it were generally practiced; yet I believe much of the talk about the harmfulness to health of people by the burial of the dead in the usual way, is pure nonsense. Certainly in small communities there can be no sanitary objection worth considering to the common practice of the burial of the dead. On the other hand, cremation is objectionable from a medico-legal standpoint, since it destroys evidence as to the mode of death. The danger of being buried alive is so slight that it is hardly an argument in favor of cremation, although some regard it as a very powerful argument in that direction.

Dr. John A. Robison says: From a sanitary view, I am in favor of cremation; from a medical standpoint, I am not, if it exhausts the supply of anatomical subjects. As to its propriety, I would not advise it until public sentiment is in its favor.

Dr. Joseph Zeisler says: For many years I have been in favor of cremation; in the first place, from a sanitarian standpoint, as it seems to me that by it we can do away with a great many of the sleeping causes of epidemic diseases, which, operating at proper times, are favorable to the development of contagious diseases. The only objection to its universal acceptation will be found to be more sentimental than practical; but when it comes more into vogue, I think this objection will fall to the ground, because it is possible to perform cremation with suitable impressive ceremonies. Speaking personally, it would be much better to think that my ashes should be in a nice vase or urn, preserved in some hall, than to think that I should rot and be eaten up by worms.

Dr. D. W. Graham says: From a purely scientific standpoint cremation has the argument; but sentimental and other reasons will determine the question for a long time to come in this country. There is no sanitary necessity for making cremation compulsory or general; and as long as there is none, it will not be extensively advocated or adopted as a substitute for burial. There might come times of contagious epidemics in certain localities, as in some of our coast cities, when the authorities should have discretionary power to enforce cremation for the public good. Hence I think the public mind should be so educated in the scientific aspects and sanitary possibilities of cremation that whenever and wherever such an emergency might arise, consideration for the

welfare of the living should govern the disposal of the dead.

Dr. Henry J. Reynolds says: Viewed from a sanitary standpoint, I think, with most medical men, that cremation is preferable to the usual method of disposing of the dead. In regard to any sentimental feeling that any person might have against it, I regard that as due entirely to custom, as when once accustomed to it, the method must certainly be attended with less obnoxious features.

Dr. Bayard Holmes says: Burial ceremonies persist among all people longer than any other. It will be very difficult to bring about so desirable a change as the cremation of the dead. Only such a dire necessity as presents itself to the inhabitants of large cities can accomplish this desirable object, and to me it seems to be the only solution of the question in the metropolitan cities. It is clean and nice, and the right way to do it.

Dr. Arthur R. Reynolds says: Those who have seen cremation have been delighted with it. They say there is less horror attending it, and less of those things which harrow up the feelings. From a sanitary point of view, it is a good thing. Personally I am in favor of it. I would as soon be cremated myself as to be disposed of in any other way, unless my friends opposed it. I would not hesitate to cremate any of my personal friends, unless they expressed a wish to the contrary before death.

Dr. L. H. Montgomery, Health Inspector of Chicago, says: Wherever germs, or the *contagium vivum*, is the prime cause of disease, incineration, or cremation, is the surest safeguard against epidemics. Hence as a sanitary measure it is superior to isolation, quarantine regulations, disinfectants, systems of sewerage, vaccination, or any other procedure that comes within the domain of sanitary surveillance. The latter methods do not invariably give us positive and infallible immunity from yellow fever, cholera, or some of the other contagious diseases. I believe a national or State law should be enacted requiring that all persons dying of yellow fever, small-pox, cholera or plague, malignant diphtheria, phthisis, especially paupers (as the potter's field, as a general thing, is a disgrace) should be incinerated. Why? Because cremation never fails to destroy the germs of disease. Personally I am not a thorough advocate of it—not wholly upon sentimental grounds, but because it seems to be looked upon by the refined, intelligent, and better classes of the community as barbaric in this enlightened Christian era.

Dr. W. E. Casselberry says: Cremation is the least objectionable of all methods of disposal of the dead, both for sanitary and other reasons. Even as a matter of sentiment, what, for instance, could be more distasteful than to suffer two large burying grounds to be located, one on each sloping bank of the Schuylkill River but four miles above the point from which Philadelphia draws her water supply.

Dr. D. A. K. Steele says: I believe in the sentiment expressed by Sir Henry Thompson in 1874, that "no dead body is ever placed in the soil, without polluting the earth, the air, and the water above and around it," hence I am a firm believer in the propriety and desirability of cremation as a general method of disposing of the dead in large cities or densely populated localities. My reasons for this opinion and belief are as follows: 1. It is an essential sanitary measure that has received the sanction of scientists and the official approval of the American Medical Association. Physicians have been its most active advocates, the first crematory in this country being erected by Dr. Le Moyne at Washington, Pa. Professor S. D. Gross, one of the most eminent surgeons of this century, emphatically and practically indorsed cremation by requesting that his body be incinerated in this crematory and his wishes were complied with. 2. It prevents the possible danger of being entombed alive. 3. It is more economical; the cost of modern funerals make it too expensive for a man to be buried. It is liable to bankrupt his estate if his relatives conform to the modern requirements of inhumation. 4. It merely anticipates the slow, repulsive disintegration of the body by nature; substituting fire, the great purifier and destroyer of infectious germs, which in a few minutes transforms the decaying organisms into a mass of innocuous ashes, instead of waiting for months for nature's slow process of the pollution of the earth, air and water by the gradual rotting of the body. 5. No violence is done to moral or religious sentiments as the last rites and ceremonies would precede incineration as they now precede entombment. 6. Concealment of criminality could be avoided by preservation of descriptive memoranda, photographs, clothing, etc. 7. In this utilitarian age the abandonment of

graves in cemeteries would be replaced by the sale of urns in vaults and the shareholders would not be impoverished.

REPORTS OF CLINICS.

HARLEM HOSPITAL, NEW YORK SURGICAL CLINIC.

DR. THOS. H. MANLEY.

Sarcoma of the Liver.

The first case presented at this clinic was a well-developed young married woman, 39 years old, brunette and of medium size. Her history, taken from the ward register, was as follows: She was a seamstress by occupation, married when fifteen years old, and had one child. She had always enjoyed good health, and never in her life was ill sufficiently to require medical aid, had an excellent appetite, and in her usual good health weighed 190 lbs. The patient had lived a regular life; never indulged in alcoholics, and had never had any kind of specific disease, or any disturbance in her menstrual functions. The first symptoms she noted in her present illness was that her waist was becoming fuller, and that her appetite was not so good. This was in March of 1889. The enlargement was observed and commented on by her friends, and she then consulted a physician, who prescribed for her dyspeptic symptoms. The remedies gave her much relief; but soon the symptoms returned, and pain was now experienced constantly in the right hypochondriac region. Although she was able to continue with her sewing, she suffered more or less, as time advanced, from the pressure this enlargement induced, until she came under the care of Dr. J. A. Hoffheimer, who sent her to Dr. Manley.

Dr. Manley said that, after making a most careful and searching examination of her case at his office, he had come to the conclusion that she was suffering from malignant disease of the liver; from that variety of cancer known as sarcoma. He would have it distinctly understood, however, that he was only speaking advisedly, for, though it seemed evident that the whole liver was involved, yet there was no jaundice, and nothing to indicate the absence of bile in the feces. Besides, the growth might not be hepatic at all; it might be of renal origin, or possibly of an ovarian variety. By a process of exclusion, however, he had concluded that the neoplasm lodged in the abdomen was confined to the liver.

A few features in the history of the case, he said, led him to regard the growth as a sarcoma. They were, first, and of preponderating importance, the clinical history—the preceding good health, and the absence of any well defined pain, until pressure was felt. Further, the character and the locality of the growth, as well as the absence of any kidney derangement, as decided by urinary analysis, led to a confirmation of this diagnosis.

Dr. Manley stated that, inasmuch as he could not say with absolute certainty what he had to deal with, his patient, being anxious, had requested that every expedient be exhausted in order that her mind might be set at rest—well aware that, if her affliction was cancer, she was doomed; and, on the other hand, if it were not, she wished it decided beyond a doubt. She was warned of the dangers attending exploratory incision, and aware that it was the only way that an absolute diagnosis could be made. She, however, clamored for a laparotomy; and hence Dr. Manley decided to open the abdomen for diagnostic purposes, and if it were found that the growth could be removed, to enucleate it through the opening made. An incision was carried obliquely downward and backward through the right linea semi-lunaris, for about six inches, when the tunics, layer by layer, covering the tumor, were divided, and separated until its capsule was reached, when it was found that the whole liver, anteriorly, was one mass of very large cancerous nodules. Everything was more or less adherent, so that in making the incision the peritoneal cavity was not opened.

The question of diagnosis having been indisputably decided, the wound was closed and dressed in the usual way.

Cancer of the Breast.

The second case for operation was a woman of forty years, who fifteen months ago had her breast excised for a scirrhus tumor in Bellevue Hospital. While the patient was being etherized, Dr. Manley said that he would call attention to a few points in this case. The first was the recurrence of the malady. This woman states that the primary growth had not been removed more than six months when pain commenced along

the seat of the scar. The incision employed at the original operation was worthy of notice. It was that kind generally in vogue at the present time, and consisted in carrying the rent made by the scalpel not only a good distance away from the neoplasm, but also opening up freely the axillary space, producing a deep, broad chasm in the hollow of this space, and exposing freely all the great vessels, large nerves, and muscles, with a view of enucleating whatever enlarged lymphatics which might be found there. On union of this incision there remained a thick, dense, cord-like cicatrix, which knotted together, by fibrous adhesions, all the structures exposed by the scalpel, leaving the patient, often, in a condition much worse than if no operation at all had been done. As in the present instance, following this extensive cicatrization there was œdema, from the fingers up the entire arm, patches of numbness, accompanied with constant neuralgic pains. Along with this the movements of the shoulder were very greatly restrained, and the limb was of little use to her.

The operation for the secondary growth was proceeded with in the usual way; and though a few enlarged lymphatics could be felt towards the axilla, Dr. Manley said that he regarded them as having increased in volume from the irritation transmitted along the absorbents, as they might be, from any focus of inflammation, regardless of its pathological character, and that he believed that the extensive mutilation, indispensable in removing deep-seated glands in cancerous affections, was practiced on deceptive reasoning; for, while we may very easily remove any number of lymphatic glands, we cannot extirpate with the knife the cancerous cachexia, of which the local affection is undoubtedly a simple manifestation.

The patient, on whom the exploratory laparotomy was done, died on the evening of the second day after operation. The autopsy revealed an infiltrating sarcoma of the liver, that organ weighing 18 lbs. The infection involved the gastro-hepatic omentum, and extended through the mesentery to the pancreas.

The patient with secondary cancer recovered.

BIRTHS IN ENGLAND.—The greatest number of births in England occur in the month of February, and the least number in June. September is the coldest month of the British year.

FOREIGN CORRESPONDENCE.

LETTER FROM PARIS.

The Influenza.—The Contagion of Phthisis between Married Persons.—New Mode of Producing Anæsthesia in Dogs.—Rectal Injections of Drugs for the Treatment of General Diseases.—A Soluble Substance secreted by the Tubercle Bacillus.—Prophylactic Measures against Tuberculosis.

PARIS, January 3, 1890.

Influenza is now prevailing in Paris in the highest degree; the disease passes through all the establishments where a large number of persons are massed together; the employés of different government offices, large dry-goods stores, large factories, etc., seem to be the easiest victims.

The disease in itself has not caused any great mortality, but there is no question about the dangerous character of its principal complications, viz., pneumonia and capillary bronchitis. These complications, luckily however, from what has been observed, only result in those cases where the patient treats himself carelessly, and takes no precautions whatever. The mortality is higher among those cases where the lungs have been previously involved, or in cardiac patients; Professor Germain Sée, at the Académie de Medicine the other day, claimed that complications were more to be feared in cases in which the bronchi were clearly involved than in those in which the lung tissue was diseased, such as in tuberculous patients. He thinks that this actual epidemic is one of special catarrhal fever. In St. Petersburg, the question has arisen whether this pneumonia was a special form of influenza-pneumonia, or an ordinary pneumonia. From the observations of Professor Sée, in his hospital wards, he is inclined to believe that the observed pneumonia is a serious form of infectious pneumonia. Five years ago, during a small epidemic which occurred in Paris, it was observed that in most of the patients there was an enlargement of the spleen, so that at that time the influenza seemed associated with malaria and typhoid fever, which diseases both produce an hypertrophic condition of the spleen. Prof. Potain, during this actual epidemic, has also directed his attention to the variability in size of the spleen, and has found an increase in size of that organ; this seems to prove the in-

fectious character of the disease; and Prof. Sée concludes that we probably have to deal with an infectious disease, non-contagious, and having nothing to do with atmospheric changes, as it has presented itself almost simultaneously in every city of Europe.

Dr. Dujardin-Beaumetz differs from Prof. Sée, and does not believe the disease is a special catarrhal fever; it is not influenza as we find it described in text-books, but it is a disease that cannot be described by one word; the remarkable point in it being its sudden onset and almost immediate appearance, which has misled certain persons to take the disease for dengue fever. The disease seems to present two periods: a nervous period and a catarrhal period. The catarrhal period alone resembles influenza. In dengue fever there are also two periods: a nervous period, and a period of physical and moral prostration. In this present disease, a rash, like in dengue fever, has also been observed. M. Leroy de Mericourt has found in his researches that in 1742, there was a disease which was then named "influence" that presented exactly the same symptoms as the present epidemic. This same article mentions the fact that epidemics of this character vary with years, climate, seasons, individualities.

He says there is no analogy between the present disease and the dengue fever, the rash observed is only temporary and has not the scarlatiniform appearance of the eruption of the dengue. The desquamation observed in this last disease is also not noticed in the present epidemic. As to the pneumonias observed, they have not the same physical signs as our ordinary pneumonias—congestion with loud murmur, delirium, trembling, and coated tongue. As to the prognosis, it is certain that lately the disease has become much more serious in character.

The treatment of the disease has been the use of antipyrine, 15 grs. to the dose, given to break up the fever as well as to combat the severe headache or pain in the back which is usually an accompanying symptom. A purgative has also been recommended at the very beginning of the trouble.

M. Leudet, at the last meeting of the Académie de Medicine, expressed his view as the result of his observation in regard to the contagion of tuberculosis between married persons. He has particularly studied what has become of the surviving person, in case of death by phthisis of either the husband or wife; and this for the twenty-five years that followed the death of one of the married persons. He has obtained results which show that out of 112 widows and widowers of certainly phthisical patients, by far the majority of them presented no suspicious symptoms of the disease, or died from a disease different from tuberculosis. As regard sex and age, his 112 cases are divided into: 79 women and 33 men; 78 from 20 to 35 years of age, and 34 from 35 to 50 and over. The duration of the disease in the patients who died was from 1 to 20 years. Out of the 112 survivors only 4 women and 3 men became phthisical; and out of these 7, 3 men and 1 woman are still alive; hence we have 105 remaining who have lived with tubercular patients, without contracting the disease. Out of these 112 couples, 80 were young, 18 have had no children, 35 have had healthy children, and 27, children that became tubercular. M. Leudet concludes that among the better classes, which live in good hygienic conditions, the contagion of phthisis is extremely rare.

At the last meeting of the Biological Society, Dr. Richet recommended an easy and rapid way of obtaining anæsthesia in animals; in dogs, for example, by the intraperitoneal injection of chloral and morphia. The anæsthetic dose employed without danger has been eight grains of chloral and $\frac{1}{25}$ grain of morphia, to every kilogramme of weight of the animal. The author has never observed any local accidents, as the solution he used was always a very weak one ($3\frac{1}{2}$ ounces of chloral, eight grains of morphia, to 32 ounces of water). It must not be forgotten, however, that the above-mentioned dose is the safe one; for an injection of only 9 grains of chloral to $\frac{1}{10}$ grain of morphia to each kilogramme of the animal will surely produce death.

For several years past, in fact since Bergeon of Lyons introduced his mode of treatment for phthisis by rectal injections of sulphurated hydrogen, the practice of using rectal injections of drugs more extensively, has become an established fact; absorption by the rectal mucous membrane being almost as rapid as by the gastric. This has been many times proven, and lately Dr. Köbner of Berlin clearly demonstrated the presence of iodine in the urine and saliva twenty minutes after a suppository of 5 grains of iodide of potassium had been placed in the rectum. If, instead of a suppository, a rectal injection of 10 grains of iodide of

potassium be given, ten minutes later the drug is found in both urine and saliva.

Injections are certainly preferable to suppositories, especially in certain local painful conditions of the rectum, in which a solid hard body, like a suppository, would produce very severe pain and therefore be almost immediately expelled before any absorption could have taken place.

Yet, in using rectal injections too often, the mucous membrane of the rectum, like that of the gastric, will become so accustomed to a certain drug, that it will no more absorb it. To prevent this, and when one desires to resort to a long treatment, every time before injecting one must administer first a simple water enema, which will act as an evacuator; then, also, to prevent the intolerance of the mucous membrane, suspend the treatment every few days. Rectal injections have been used lately in several diseases with success. Professor Ternier of Lyons has given to chloritic patients, instead of the pills or other preparation of iron, rectal injections twice a day morning and evening, of 4½ ounces of the blood of oxen, defibrinated and kept in a cool place; the blood being heated to the normal temperature of the body just before using. These injections are made every day for a week, then discontinued for a week, and then renewed again, and so on. If any pain or colic should occur, the addition of three or four drops of laudanum would relieve and prevent it.

Dr. Talichet from Roanne uses creasoted rectal enematæ, which are prepared as follows: he takes four grains of finely pulverized Tragacanth gum on which he drops, one drop after another, the creasote; he then adds water, after the mixture of gum and creasote has been sufficiently triturated, and at the moment of using he mixes the whole up in a glass of linseed water, to which he adds a few drops of laudanum. The dose of creasote is progressively increased from ten drops—the initial dose—to forty drops. These injections are given twice a day, one or two hours after a meal.

Dr. Behring also recommends the rectal injection of three drachms of an emulsion containing 7 to 15 grains of iodoform, in tuberclosis.

Dr. Rabow from Lausanne (Switzerland) claims to obtain more rapid results in cases of epileptiform convulsions, melancholia, etc., by the use of enemata containing from 10 to 30 grains of bromide of potassium than by any other means. The sedative action of the drug is much more rapid than when given by the mouth.

In cases of asthma, where patients were unable to take any more iodide of potassium by the stomach, and also in a case of exophthalmic goitre and of cranial periostitis of rheumatic origin; the aqueous rectal injection of 10 to 25 grains of iodide of potassium acted wonderfully well in the practice of Dr. Lazarus from Berlin.

Dr. Köbner, of Berlin, has principally used the rectal method to combat the accidents of celebral syphilis, when a large quantity of iodide of potassium is required, and has obtained most satisfactory results in such cases. These enematæ he used, contained 15 to 30 grains of iodide of potassium in 100 grammes of water, and was given twice a day. With this one might also employ frictions with some kind of mercurial ointment.

Rectal injections are certainly called upon to render good services, in the treatment of general disease; but one must never forget when the medication is prolonged that a period of rest is necessary to allow the rectal mucous membrane to return to its normal condition. A week's repose for every two weeks' treatment will afford a sufficient rest to the parts.

Dr. Courmont, from Lyons, presented before the Society of Biology the result of his researches on a "soluble substance, secreted by a tubercle bacillus." The author has studied a new bacillus which produces tuberculous lesions, and he has found in his culture that this bacillus secretes a soluble substance which, instead of being a preventive, on the contrary helps the evolution of the bacillus. If one injects into a guinea-pig one cubic centimetre of an old culture, that has been sterilized and filtrated, this guinea-pig will be especially apt to become infected by the bacillus, and this is proven by the fact that if to this animal a small quantity of tuberculous matter be inoculated, the animal will die sixteen times more rapidly than another who has not received the injection of the old culture beforehand. Death taking place in fifteen to sixteen hours in the guinea-pig, and twenty-three hours in the rabbit, by general infection. The filtrated culture, which produces this aptitude to tuberculous, is not toxic by itself; a very high dose might cause accidents, but they

are nothing as compared to the infection following secondary inoculation. He has never seen that any quantity of this substance, mixed to a fresh culture of bacillus, at all helped the development of the bacilli.

At the very last meeting of the Académie de Medicine the very interesting question of prophylactic measures to be taken against tuberculosis was brought up. Professor G. Sée opened the subject by speaking of the contagion by the atmosphere, but said that nothing has been proven as yet in regard to atmospheric contagion; even the last researches of Koch and Cornet were unfavorable to it. Dr. Cornet has examined the air of twenty-one dirty wards of diseased persons, and found in fifteen of them tuberculous dust; in other well kept wards he found no trace of tuberculous material. He arrived at the following conclusions, viz., that there is no ubiquity of the tubercle bacillus; that we often demonstrate the tubercular virus where one or several tubercular patients can be found, but that the bacillus is totally absent in wards where phthisical patients have not been kept long, and as the tubercle bacillus outside the human organism never multiplies itself and can only live for a limited time, the tuberculous man is the one to be considered as being the most frequent source of infection, yet it is demonstrated, on the other hand, that under no circumstances does the expired air contain any bacilli.

Where, then, does the infection reside? There are no two answers; the sputum is the real danger! The virulence of tubercular sputum is so great that a $\frac{1}{100\,000}$ dilution of it is still infectious, hence it is against sputa that all our prophylactic measures must concentrate, and for this it suffices that patients, instead of expectorating on the floor, should use small cups containing water.

The only atmospheric contagion possible would be the one derived from the dust from sputum; still, if a patient dies, it does not mean that we ought not to disinfect all that has been in contact with him.

A few words on milk. Dr. Böllinger, of Munich, has demonstrated that, when milk from a tuberculous cow has been mixed with milk derived from other cows, this milk loses all its infectious properties. Dr. Valin has stated that milk ought to be boiled and that boiling would not render it indigestible. This is an error, as it is a well-known fact that for adults as well as for children raw milk is certainly the best, at the same time, when raw the milk retains its diuretic properties, which it loses when boiled. Professor Sée has never yet seen a case of tuberculosis which could be attributed to milk. In regard to meat it has been demonstrated that Koch's bacillus was never found in the muscles.

The important question is, what shall we do in a family where tuberculosis is hereditary? Up to the present time we really all ignore the hygienic and individual conditions which will develop the disease. Predisposition is a word that only hides our ignorance, for, in a family with tubercular antecedents, we often see the very strong members of a family stricken down by the disease, while the enfeebled ones resist it wonderfully. Before heredity all we can do is to recommend good aeration, gymnastic exercises, etc.

Professor Sée finally draws the following conclusions: First, atmospheric contagion of phthisis does not exist. Second, transmission of the disease, with the exception of matrimony, takes place only by dried sputa, which alone possesses the infectious property. It is the sputum that must be destroyed. It is not the patient who is the danger, but the sputum. Third, alimentation by milk and meat is devoid of any danger. Fourth, tubercular predispositions are quite unknown in their nature and signs.

PERISCOPE.

Extirpation of Cysts and Adenomata of the Thyroid Gland.

The excellent results obtained by Mr. Charters Symonds in his treatment of these growths by extirpation, as detailed by him at a recent meeting of the Clinical Society of London, will serve to draw the attention of other surgeons to the method of treatment therein recommended. Mr. Symonds laid stress upon the following points: the median incision to be made in all cases; the capsule of the cyst to be looked for—as a rule it is at once seen if the tumor be superficial or if a part of it project beyond the margin of the gland; when the cyst is found to contain fluid all is to be evacuated and the cyst peeled out; if the tumor be solid it is to be enucleated. The capsule

must be exposed and patiently looked for. In some cases the margin of the gland must be raised up. In two of Mr. Symonds's cases the lobe was removed on the supposition that the growth was incapsuled intimately; but afterwards this was not found to be the case. All his eight cases did well, primary union resulted in every one of them; and there was no hemorrhage in the simple cases. The rapid recovery of his patients generally contrasted favorably with the much slower progress of patients treated by other methods. Thus, tapping and injecting with perchloride of iron is apt to produce hectic symptoms, and some patients thus treated have almost lost their lives. In fact, when much solid material exists in the growth injection is unsuitable. If such cases be treated by injection serious results are likely to occur. If the cyst be opened and sutured to the skin, and stuffed, the case is long under treatment, the resultant scar is large, and there is more danger than when excision is performed. Possibly a small incision and scooping out of the tissue may in some cases succeed; but it appears to be attended with much danger of hemorrhage. In one of Mr. Symonds's cases the resultant cicatrix was only an inch and a quarter long, although an adeno-cystoma, measuring 3 by 2 inches, had been removed. In this case the fluid had been first evacuated, after the manner recommended.—*British Med. Jour.*, Jan. 11, 1890.

Treatment of Intestinal Obstruction by Ether Enemata.

Dr. Clausi has successfully employed ether in two cases of intestinal obstruction in which ordinary methods of treatment had failed. He dissolved three drachms of ether in alcohol and adds about ten fluid ounces of fennel water, injecting the whole into the rectum as far as possible. A painful sensation of heat was felt all over the abdomen, and an evacuation having the odor of ether at once occurred. A little while after there were abundant evacuations of feces, accompanied by the disappearance of colic, etc.

Dr. Clausi thinks that the ether provokes peristaltic movements by irritating the terminations of the motor nerves of the intestines through the rapid distension caused by the ether vapor.—*Medical Chronicle*, Jan., 1890.

The Health of London in 1889.

Remarkable as has been the continual decline of the death-rate in England and Wales in recent years, the decrease of the rate of mortality in London, with its aggregate population of more than four millions, with constantly increasing density, is still more remarkable. The Registrar-General, in his last annual summary, reported that the death-rate in registration London in 1888 was 18.5 per 1,000, being "far the lowest death-rate as yet recorded in London," the next lowest being 19.8, 19.9, and 19.6 in the three immediately preceding years 1885–86–87, previously to which the London death-rate had never fallen below 20 per 1,000. The death-rate in 1889, moreover, again fell, and was considerably below the low rate in 1888. The Registrar-General's return for the fifty-second week of 1889, just issued, affords the means of calculating that the mean annual death-rate in London in the fifty-two weeks of last year did not exceed 17.5 per 1,000, was 1 per 1,000 below the rate in 1888.—*Lancet*, Jan. 4, 1890.

Alum Enemata in Dysentery.

Dr. Henry F. Norbury, of Plymouth, England, reports the following case in the *Lancet*, Jan. 11, 1890: A seaman, thirty-one years old, had contracted dysentery three and a half years previously, and since that time had never enjoyed his usual health. He had frequently suffered from tormina, and had from three to ten loose, offensive stools daily, accompanied by much tenesmus and by occasional passages of blood, and had gradually become feeble and emaciated. During this long period he was frequently under treatment, but with only slight benefit. He was unable to continue his duties on board ship, and had to return to England.

When first seen by Dr. Norbury, his appetite was bad, his tongue foul; he passed, amid much straining, from three to eight loose, frothy, offensive motions daily, sometimes containing blood; but, although griping pains were often very distressing, there was neither tympanites nor abdominal tenderness. He was carefully dieted, and among the drugs prescribed for a long period were compound ipecacuanha powder, aromatic sulphuric acid, decoction of hematoxylon, lead pill with opium, com-

pound kino powder, chlorodyne, sulphate of copper pill with opium, and liquor ferri pernitratis, besides enemata of opium, of nitrate of silver, and of sulphate of zinc, and suppositories of tannin. Dr. Norbury states that he derived no benefit whatever from any of the above. Lastly, an enema containing half an ounce of alum in ten ounces of water, to be administered night and morning, was prescribed. It produced slight sweating at first, but the effect in a couple of days was remarkable; the stools were reduced to one or two daily, and shortly became of natural consistence. This treatment was continued for eighteen days, when the patient expressed himself as feeling better than he had done for years; he had also gained considerably in weight and looked robust. He was kept under observation for some days after the enemata were stopped, to ascertain if there would be any return of his complaint, but as there was none he resumed his ordinary avocations.

Death Under Chloroform.

A patient, aged sixty-five, was admitted to the Queen's Hospital, Birmingham, with a tumor in the abdomen. An exploratory operation being decided on, and the patient assenting, chloroform was administered by one of the house-physicians. Before complete anæsthesia had been attained, and before any attempt had been made to commence the operation, the patient suddenly gave one or two gasping inspirations and then ceased to breathe, and the heart stopped. Every effort was made to restore him, but without avail. The heart was carefully examined the day before the administration, and was believed to be quite healthy, an opinion confirmed at the *post-mortem* examination, when no morbid condition was found in that organ. There was malignant disease of the stomach.—*British Med. Journal*, Jan. 4, 1890.

Burial Reform in England.

After a period of incubation which has been spent in educating public opinion in the matter of the hygienic iniquity of the present system of interment, the group of sanitary philanthropists with the Duke of Westminster at their head, who have taken up the ungrateful task of bringing the necessary reforms to pass, have at last decided to approach the Government with the object of having their contentions endorsed by the legislature. How far the general public will consent to allow their cherished usages in this respect to be interfered with we are unable to guess, but the object in view will certainly commend itself to those who have a thought beyond the morrow. What is required is the prohibition of leaden and other solidly constructed coffins, the effect of which is to indefinitely retard complete decomposition, and so prolong the period during which the dead are not only æsthetically objectionable, but are an indisputable source of danger to the living, wicker work or papier mâché receptables alone being used. This is after all no very startling innovation, and is not open to the sentimental and theological objections which some persons entertain to the more radical plan of cremation. It is merely a sanitary precaution of an elementary kind, and whatever the immediate fate of the movement may be it must sooner or later impose itself. The effect of legislative interference would simply be to hasten and generalize the practice among those who have too much to do in this world to find time to decide upon the material of which their coffin is to be made. We are rather inclined to agree with Sir Spencer Wells in his suggestion that in future only properly cremated remains should be admitted to funeral honors in Westminster Abbey and other national mausoleums. Not only would there result a valuable economy of space, but the very deleterious odor of decomposing sanctity, which pervades many of our sacred edifices, would be done away with.—*Medical Press and Circular*, Jan. 1, 1890.

Bismuth Mixture.

The following bismuth mixture for stomachic catarrh, painful indigestion, alcoholic catarrh of the stomach, etc., is claimed by the *British and Colonial Druggist*, for Jan., 1890, to be most efficacious:

℞ Bismuthi Carb.	ʒij
Sod. bicarb.	gr. lxxx
Tinct. hydrastis.	f ʒss
Tinct Nux Vomicæ	m xx
Syr. Ginger	f ʒj
Pulv. Tragacanth. Comp.	ʒj
Aquæ dest., q. s. ad.	f ʒviij

M. Sig. One-eighth part, undiluted, three times daily, twenty minutes before food.

Phosphorus in Diabetes.

Mr. Balmanno Squire has reported in the *London Med. Recorder*, Dec. 20, 1890, a case in which he observed that phosphorus given to a patient for eczema, notably relieved diabetes, from which he was also suffering. The patient, a man 60 years old, had for a long time been affected with eczema of the face, neck, and upper limbs. In addition to local remedies, "perles" of phosphorus were prescribed "for the improvement of the eczema." One "perle" was taken three times a day for three days, after which time the dose was doubled. Ten days later, when Mr. Squire again saw the patient, the eczema was nearly well, and, in addition to that, very sudden and marked improvement had taken place in the diabetes. The patient had previously been obliged to get up four or five times in the night to pass water, but for some nights previous to his visit to Mr. Squire he had had no occasion to do so. The amount of urine passed in the twenty-four hours had notably diminished, and its color, which had before been very pale, had become fairly natural. Thirst, which had tormented him greatly, was no longer troublesome, and he felt altogether very much better in health. Mr. Squire is not prepared with any theory to account for the beneficial effect of the phosphorus in this case beyond the somewhat oracular suggestion that, as the undue or prolonged administration of phosphorus is capable of producing fatty degeneration of the liver, this circumstance would seem to afford a clue to its marked action in controlling the diabetes. He also thinks it possible that the effect of the phosphorus may have been due to its action on the nervous system. It does not appear that there was any diminution in the amount of sugar passed in the urine.

Total Prolapse of the Uterus in a Young Nullipara.

The following case is reported from Dr. Barton C. Hirst's service in the Philadelphia Hospital:

A. S., 17 years old, gives the history that while doing housework as a servant, when only eleven years old, she attempted to lift a heavy weight, and, as she expresses it, "so strained herself that her womb began to fall down." The prolapse thus begun got gradually worse until it became complete, when the child was about fourteen. Upon close questioning, it further appeared that the girl had led the life of a prostitute from her eleventh year. She had been in the habit of replacing her womb and keeping it in place with large wads of newspaper and had thus gone about with comparative comfort. The case was treated by performing a complete anterior colporrhaphy with sunken catgut sutures and doing a posterior colporrhaphy somewhat after the manner of Emmet. Both wounds united perfectly, and the uterus appears to be firmly supported in a good position high up within the pelvic cavity. — *University Magazine*, February, 1890.

Liniment for Rheumatism.

Dr. J. D. Staples states in the *Hospital Gazette* that he has found oil of wintergreen very satisfactory, and in almost every case it gives relief when administered internally in minim doses. He has also used the oil for acute gout. His prescription for a liniment is:

℞ Oil of wintergreen . . . . . ℥ ij
Olive oil . . . . . ℥ iij
Soap liniment . . . . . ℥ iij

M.

A very little of the liniment is used; caution the patients against using too much, and, if the rheumatism is limited to one or two joints, he recommends applying cotton-wool after its application, and then bandaging the joints—*Chemist and Druggist*, Jan. 4, 1890.

The Prevention of Lead Poisoning.

The water committee of the Sheffield Town Council, England, upon whom devolves the urgent duty of taking immediate steps to prevent lead contamination of the drinking water, has under consideration a report prepared by Mr. Eaton. The processes for preventing access of lead to the stomach through the medium of drinking water may be divided into three groups, namely: (1) processes for preventing the water from dissolving lead; as an example of such treatment, we may mention the addition of lime to the water, whereby free acids are neutralized, and their solvent action upon lead avoided; (2) processes for avoiding contact

of the water with lead, for example, by using slate cisterns, galvanized iron cisterns and glass-lined or tin-lined pipes; and (3) processes for removing lead from the water after it has been dissolved thereby, as examples of which filtration through compressed carbon, sand, etc., may be instanced. It appears that the Sheffield water contains free acid. Clearly it is more satisfactory to strike the evil at its root by treating the water before it gains access to the poisonous metal in such a way as to prevent it from being contaminated thereby, than to trust to measures for preventing contact with the metal, or for removing it after it has been dissolved in the water.—*British Med. Journ.*, Jan. 11, 1890.

Bacteriology of Granular Lids.

Dr. Wittram, of Dorpat, has examined a number of cases of trachoma or granular lids occurring in the Riga Hospital from a bacteriological point of view, with the object of deciding whether the cocci which are found in this affection are or are not the cause of it. He examined thirty-six chronic and three acute cases bacteriologically, employing as nutritive media meat peptone, agar-agar, and coagulated blood serum. With the cocci thus cultivated from the contents of the follicles and secretion of the conjunctiva eight inoculations were performed on healthy human conjunctivæ, but in no case did a granular condition result. Indeed, Dr. Wittram's results tend to throw doubt on the theory that these microbes have a definite pathogenic relation to the disease in question.—*Lancet*, Jan. 11, 1890.

Diuretin, a New Diuretic.

The diuretic action of caffeine being open to the objection that it may be accompanied by sleeplessness and restlessness, it has occurred to Dr. Gram, of Copenhagen, to employ a sodio-salicylic compound of theobromine, to which he has given the name of "diuretin." Notwithstanding the strong resemblances between theobromine and caffeine, diuretin is alleged to produce strong diuretic action without in any way affecting the central nervous system, and to give satisfactory diuresis in cases of renal and cardiac dropsy in which digitalis and strophanthus have been inoperative. It is described as occurring as a white powder, containing 50 per cent. of theobromine, which dissolves in less than half its weight of water with the aid of heat, and remains in solution after the liquid had cooled. Six grammes have been given daily in drachm doses.—*Lancet*, Jan. 4, 1890.

Quinsy.

For the prompt dispersal of threatened quinsy apply with a brush the following solution three times a day:

℞	Tannini	gr. xv
	Tinct. iodii	gtt. iij
	Acid. carbolici	ʒ ss
	Glycerini	f ʒ v
	Aquæ	f ʒ ijss

—*Chemist and Druggist*, Jan. 4, 1890.

Idiosyncrasy Regarding Tannin.

Dr. Lange, of Copenhagen, mentions a case in which a patient presented a rare idiosyncrasy regarding tannin locally applied. He was a gentleman about thirty years of age, who was suffering from catarrh of the nose and pharynx, examination revealing nothing but a reddened and injected condition of the mucous membrane. The pharynx was swabbed out with a solution of tannin of the strength of 1 in 15. Immediately afterwards the mucous membrane became greatly swollen, the nostrils entirely occluded, an irritating watery fluid being secreted. The uvula and soft palate were found to have become œdematous, the former lying on the dorsum of the tongue. Ice was given to suck and cold compresses were applied. About an hour later, the patient complained of a certain degree of stupor and of a distressing general itching affecting the whole of the surface of the body, which presented the appearance of general urticaria. The next day this had disappeared and the swelling of the nasal and pharyngeal mucous membrane had greatly diminished. The patient then mentioned that twice before he had suffered from almost exactly the same symptoms after being treated with tannin—once in the form of a powder and once in that of solution. On one occasion he had been seized with severe lassitude and prostration, his "brain feeling quite empty," and he had noticed that his urine was quite dark on both occasions.—*Lancet*, Jan. 11, 1890.

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CHLORALAMIDE AND SOMNAL.

The inducement of sleep, free from all unpleasant symptoms, is a problem which the science of therapeutics has as yet by no means satisfactorily solved. In spite of the long list of hypnotics and narcotics that are already known, we are forced to confess that we know none which entirely fills the principal requirements: viz., rapidity and certainty of action, and absence of any untoward effects.

Of the two latest additions to the ranks of hypnotics—chloralamide and somnal—much has been already written and said, and paragraphs devoted to their praise have appeared in the majority of medical journals, yet, accurate reports, based on extensive clinical experience, have been wanting. Chloralamide has, indeed, been largely conceded to be both efficient and harmless, and somnal has been characterized by some German writers as the "long looked-for ideal hypnotic." It seems unfortunate that these drugs, which, only a short time since, were ushered into the practice of medicine with so much *éclat*, and which gave apparent promises of so brilliant a future, should be doomed to an ephemeral existence, now that the glamor of occasional success is fading away under the light of clinical tests and scientific research.

Chloralamide is a small white crystal, soluble, and, although slightly bitter, of a not very unpleasant taste. Somnal, or more correctly "etherial chloral-urethane," is a colorless, watery liquid, with spirituous odor and a biting, bitter taste. The literature of both of these drugs is but fragmentary and therefore easily reviewed, being confined almost exclusively to their birthplace, Germany. Dr. P. Guttmann states that he has found somnal useful "in most cases" of agrypnia. Dr. Krafft-Ebing, of the Charité Hospital, in Berlin, claims to have used it "with good results." Concerning chloralamide, observers have almost universally conceded that the drug is not a narcotic, but a hypnotic; that it exerts no accompanying effect on either the heart or respiration. Drs. Hagen and Hüflèr, however, claimed to have observed a case of collapse following its use. Dr. Kny, of Strasburg, prefers it to sulphonal and claims that it produces deep sleep, and has but very little influence upon the heart's action. Dr. Lettow, of Vienna, speaks of it as a very useful drug but as not always certain in its action. Its influence upon the alimentary tract has been variously reported; some writers claiming to have observed little or no digestive disturbances following its use, while others report marked symptoms of such a character.

A most extensive and careful series of clinical experiments have recently been concluded in the city hospital of Friedrichshain, Germany. These were conducted by

Dr. Adolph Robinson, one of the staff of the hospital, under the guidance of Professor Fürbringer, of Berlin, and are reported in detail in the *Deutsche Medicinische Wochenschrift*, Dec. 5, 1889. The results obtained are so conclusive as to admit of but little further argument on the subject. One hundred and twenty tests with these drugs were made on fifty different patients. In every case both drugs were tested. The medicine was always given in solution, with a little extract of liquorice to disguise the taste. The diseases, accompanied with insomnia, in which the drugs were tested, included delirium tremens, cardiac degeneration and valvular insufficiencies, typhoid fever, articular rheumatism both acute and chronic, cancer of the stomach, nephritis, pleuritis, stricture of the œsophagus, secondary syphilis, dementia, and lead-poisoning.

The results obtained were as follows: in fifteen instances somnal acted well, in thirteen tolerably well, and in twenty-two cases it failed signally. Chloralamide gave good results in thirteen instances, tolerably good results in fourteen, and failed in twenty-three. These figures show that somnal proved itself worthless in 44 per cent. of the tests, and that chloralamide failed to exert any hypnotic action in 46 per cent. of the cases in which it was used. If now we compare the action of the drugs in relation to the character of the insomnia, still poorer results will be obtained. Among the cases in which insomnia was caused by pain, somnal gave satisfactory results in only 15 per cent., and chloralamide in only 10 per cent., while in the cases unaccompanied by pain, the hypnotic action of somnal was observed in 55.6 per cent., and of chloralamide in 33.3 per cent. This proves clearly that both drugs are merely hypnotics, not narcotics.

The two principal postulates demanded of hypnotics—safety and promptness—are by no means fulfilled by chloralamide, and only partially so by somnal.

Chloralamide has been claimed to exert no harmful effect upon the circulation; but the experiments at the Friedrichshain Hospital have proved exactly the contrary, and accompanying effects, both upon the heart and circulation, were repeatedly observed. In some cases, after the use of chloralamide, the quickening and weakening of the pulse were so marked and so great that a most active stimulative treatment had to be resorted to at once. These alarming symptoms followed the administration of 30 grains of the drug. The doses employed in most cases ranged from 15 to 30 grains.

The results obtained by somnal were far more favorable in this respect. Thirty-minim doses only lowered the pulse slightly, but it still remained full and strong, and the patients awoke after a somewhat broken sleep, without any unpleasant symptoms. Larger doses gave poorer results, the sleep being intermittent and restless. Deep sleep was not produced by either remedy.

Regarding the effects of the drugs on the alimentary tract, most unpleasant symptoms were frequently noted. Nausea was produced by somnal in fourteen cases, and by chloralamide in nine cases. Vomiting followed the administration of somnal in several cases, and always occurred without warning within an hour after its administration. In two instances vomiting was excessive. In the rest of the cases in which somnal was employed more or less nausea and pain in the stomach was complained of for twenty-four hours. Its repeated use for several consecutive days gave rise to loss of appetite and malaise.

Chloralamide in 30-grain doses did not produce any vomiting, although several patients complained of painful sensations in the region of the stomach the day after taking it. Still, relatively speaking, even after a continued use of the drug, but slight digestive disturbances were produced. Other symptoms, such as dizziness, lassitude, and headache, were observed in the morning following its use, in varying degrees of intensity. In sixteen instances a period of excite-

ment was observed to follow the use of chloralamide.

In cases of delirium, even when as much as 1½ fluid drachms of somnal were given, within twelve hours, little or no hypnotic action was obtained, and this preparation can, therefore, be positively regarded as entirely worthless in these conditions. In kindred cases 60 grains of chloralamide, given in two 30-grain doses, two hours apart, gave good results in five out of eight instances. Under such circumstances it may be said that the action of chloralamide is as prompt as that of chloral hydrate.

In summarizing the practical value of the two preparations the following is evident:

The *hypnotic action* of either is uncertain; but it may be regarded as positive in 30 per cent. of the cases in which somnal, and 26 per cent. in which chloralamide is employed.

Of *accompanying symptoms*, any effect on the heart's action is almost absent in somnal, whilst chloralamide, especially under certain circumstances, is liable to produce very grave symptoms in this respect. Unpleasant effects upon the alimentary tract are observed to follow both drugs with comparative frequency. The general condition of the patient is also frequently more or less impaired.

The *taste* of somnal is unpleasant, but not nauseating, that of chloralamide is but slightly unpleasant. The *price* of either drug is but small.

THE EXCITING CAUSE OF TETANUS.

The nature of tetanus and its cause have been of great interest to pathologists for many years. The experiments of Carle and Rattone, in 1884, helped to clear up the mystery surrounding the disease. These observers were able to demonstrate that tetanus is an infectious and transmissible disease. In the following year Nicolaier found that there were bacilli in the superficial layers of the earth which, when inoculated in rabbits and guinea-pigs, were capable of producing the typical symptoms of tetanus, followed by fatal result. Soon after this, in 1886, Rosenbach showed that the bacilli of Nicolaier were also present in tetanus occurring in human beings. As, however, some other observers failed to find them in the pus of patients with tetanus, and in animals the subject of experiment, these bacilli could not be regarded with certainty as the exciting cause of tetanus, especially since up to that time no one had succeeded in isolating the bacillus in pure cultures and in producing artificial tetanus by inoculation. Dr. Kitasato found the subject in this condition, and he appears to have accomplished what previous investigators in this field had failed to do.

The paper containing the results of his experiments was read before the last Congress of the German Surgical Society, and is published in full in the *Archiv für klinische Chirurgie*, Volume thirty-nine, Part two. Kitasato asserts that the bacilli of tetanus can be isolated with certainty if the proper method is pursued. This consists in heating on a water bath, for a half-hour or hour, at a temperature of 176° Fahr., mixed (or impure) cultures which have previously been in an incubator for a few days; after being heated the cultures are transferred to closed vessels into which hydrogen is introduced. The whole culture is then maintained at a temperature of from 64° to 68° Fahr. In about a week the colonies began to form.

The bacilli of tetanus, as observed in the pure cultures, possess certain noteworthy characteristics. In the first place, they grow only where air is excluded. They can be cultivated upon weak alkaline agar-agar, and upon gelatine, and grow more rapidly in these media if from one-half to two per cent. of cane sugar is added to them. They give to the cultures an extremely offensive odor. They thrive best at a temperature of 97° to 100.5° F. The bacilli form spores, when at the temperature named, in thirty-six hours. The spores are round, thicker than the

bacilli, and are found at the end of bacillus, so that the latter presents the bristle-like aspect described by Nicolaier. They are capable of pretty strong resistance to heat, are still capable of life after being heated for an hour at a temperature of 176° Fahr. in a moist condition; on the other hand, if kept for five minutes at a temperature of 212° Fahr., in a steam apparatus, they are destroyed. The bacilli also exhibit a good deal of resistance to germicides. The most effective of the latter appears to be corrosive sublimate, in a solution of one part to one thousand of water, with one-half per cent. hydrochloric acid. In this solution the bacilli lose their virulence after half an hour.

Cultures containing spores which have been dried on silk threads and then kept some days in an exsiccator over sulphuric acid, and then in ordinary air, are still virulent after the lapse of several months; spores mixed with sterilized earth are likewise virulent for a long time.

The bacilli of tetanus have a decided, but slight, peculiar, lively movement, which is increased when they are kept warm; when spores are present, however, the bacilli are immovable. As regards staining, they take the aniline dyes, and also Gram's stain.

The specific character of these bacilli is shown by the fact that when mice are inoculated by the point of a platinum wire previously dipped in a fine culture, they become affected with typical tetanus without exception in twenty-four hours, and die after two or three days. Rats, guinea-pigs, and rabbits can also be infected if a somewhat larger quantity of the culture, according to the size of the animals, is employed.

Kitasato concludes, as the result of his experiments, that the presence of such foreign bodies as cotton, splinters of wood, etc., which formerly were thought to be necessary to obtain a successful result in inoculation, are not needed, the bacilli of tetanus being sufficient. It is disappointing, however, to read his frank admission that the most careful search, in the case of animals dying of tetanus from inoculation, failed to find either spores or bacilli at the point of inoculation or in any of the organs. Moreover, he was unable to produce tetanus in other animals with the organs of an animal dying of tetanus, nor could he succeed in cultivating the bacilli from them. The explanation of this failure may be, as Kitasato suggests, that the bacilli very quickly disappear in the animal's body; but until this is proved there will be ground to dispute the specific character of Nicolaier's bacillus of tetanus. The whole tone of Kitasato's paper, however, is that of the true scientific investigator: he states what he has found and wherein he has failed briefly and with no attempt at evasion or concealment. We sincerely hope that he will continue his investigations until the relation of Nicolaier's bacillus to tetanus, and also that of the chemical poison discovered by Brieger, will become perfectly free from all obscurity.

NON-RETENTION OF URINE IN YOUNG GIRLS AND WOMEN.

No disease is more annoying or more depressing to a patient than a disease of the bladder which calls for an almost constant evacuation of that organ. Frequent micturition is usually due to cystitis, or urethritis, or to the presence of a tumor or foreign body in the bladder, but at times it is due to indifferent causes. After a time in certain cases the walls of the bladder contract, owing to hypertrophy of the muscular layer, and the capacity of the bladder is reduced to one or two ounces. Such patients are obliged to urinate every few minutes during the day, and at night when asleep the urine dribbles almost continually.

Dr. H. Marion Sims, in a contribution to the *Amer. Journal Obstet.*, Sept., 1889, advocates the systematic use of injections of warm water to dilate the bladder and increase its capacity, for the alleviation and cure of this distressing condition; and re-

ports a number of cures effected by the method. The apparatus used by Dr. Sims is a silver catheter attached by means of a rubber tube to a Davidson's syringe. He injects water, comfortably warm, to the bladder, by means of this apparatus until the bladder is distended. This is indicated by the sensations of the patient. The process is quite painful, and, sometimes, to the patient, "unbearable," and requires patience on the part of the physician and bravery on the part of the patient to bring about good results. The injections are practiced daily for one, three or more months, until the bladder will hold about a pint of water, and then not so frequently. Improvement in the patient's condition and ability to retain urine usually keeps pace with the dilatation. The water injected should not be allowed to remain, but should be drawn off at the conclusion of each treatment.

This method of treatment appears logical, and the results in the hands of Dr. Sims have been quite brilliant, as many of the cases had been the rounds of physicians and had been subjected to many methods of treatment. Apparently the only danger inherent in the method is the risk of rupturing the bladder, which could only occur under exceptional conditions of the walls of that organ, or when undue violence was used in giving the injection. Dr. Sims is to be congratulated for having perfected a successful method of treating a distressing class of cases.

NOTES AND COMMENTS.

Tenth International Medical Congress at Berlin.

We are in receipt of a formal invitation from the General Committee of Organization of the Tenth International Medical Congress, together with the following announcement:

Regulations and Programme.—I. The Tenth International Medical Congress will be opened in Berlin on Monday, August 4, 1890, and will be closed on Saturday, August 9.

II. The Congress shall consist of legally qualified medical men who have inscribed themselves as members, and have paid for their card of membership. Other men of science who interest themselves in the work of the Congress, may be admitted as extraordinary members.

Those who take part in the Congress shall pay a subscription of 20 marks ($5) on being enrolled as members. For this sum they shall receive a copy of the Transactions, as soon as they appear. The enrolment shall take place at the beginning of the Congress. Gentlemen may, however, be enrolled as members by sending the amount of the subscription to the treasurer[1]) with their name, professional status and residence appended.

III. The object of the Congress is an exclusively scientific one.

IV. The work of the Congress will be discharged by eighteen different sections. The members shall declare upon enrolment to which section or sections they intend more particularly to attach themselves.

V. The Committee of Organization shall, at the opening sitting of the Congress, suggest the election of a definite committee (or bureau) which shall consist of a president, three vice-presidents, and of a number —as yet undetermined—of honorary presidents and secretaries.

At the first meeting of each section a president and certain number of hon. presidents shall be elected; these latter shall conduct the business of the sections in turn with the presidents.

On account of the different languages employed, a suitable number of secretaries shall be chosen from among the foreign members. The duties of the foreign secretaries shall be confined to the sittings of the Congress.

After the termination of the Congress the editing of the Transactions shall be carried out by a committee specially appointed for this purpose.

VI. The Congress will assemble daily, either for a general meeting or for the labors of the different sections.

The general meetings will be held between 11 and 2 o'clock. Three such meetings will take place.

The time for the sittings of the various

[1] Treasurer's address: Dr. M. Bartels, Berlin SW., Leipzieger-strasse 75.—Please to enclose a visiting-card.

sections will be fixed by the special committee of each section, it being understood, however, that no such sittings are to take place during the hours allotted to the general meetings.

Joint sittings of two or more sections may be held, provided that the bureau of the Congress can offer suitable rooms for such sittings.

VII. The general meetings shall be devoted to:

1. Transactions connected with the work and general management of the Congress.

2. Speeches and communications of general interest.

VIII. Addresses in the general sittings, as well as in any extraordinary meetings which may be determined upon can only be given by those who have been specially requested by the Committee of Organization.

Proposals relative to the future management of the Congress must be announced to the Committee of Organization before July 1, 1890. The Committee shall decide whether these proposals are suitable to be introduced for discussion.

IX. In the sittings of the sections, questions and problems will be discussed, which have been agreed upon by the special Committees of Organization. The communications of those appointed by the committee to report on a subject, shall form the basis of discussion. As far as time allows, other communications or proposals, proceeding from members and sanctioned by the Committee of Organization may also be introduced for discussion. The Bureau of each section decides as to the acceptance of such offered communications, and as to the order in which they shall come before the meeting, always provided that this point has not been already determined in the sitting itself by a decree of the section.

Scientific questions shall not be put to the vote.

X. Introductory addresses in the sections must, as a rule, not exceed twenty minutes in length. In the discussions no more than ten minutes are allowed to each speaker.

XI. All addresses and papers in the general and sectional meetings must be handed over to the secretaries, in writing, before the end of the sitting. The Editorial Committee shall decide whether—and to what extent—these written contributions shall be included in the printed Transactions of the Congress. The members who have taken part in the discussions, will be requested to hand over to the secretaries, before the end of the day, in writing, the substance of their remarks.

XII. The official languages of all the sittings shall be German, English, and French. The regulations, the programme and the agenda for the day will be printed in all three languages.

It will, however, be allowable to make use of other languages than the above for brief remarks, always provided that one of the members present is ready to translate the gist of such remarks into one of the official languages.

XIII. The acting president shall conduct the business of each meeting according to the parliamentary rules generally accepted in deliberative assemblies.

XIV. Medical students, and other persons, ladies and gentlemen, who are not physicians, but who take a special interest in the work of a particular sitting, may be invited by the president or be allowed to attend the sitting by special permission.

XV. Communications or inquiries regarding the business of separate sections, must be addressed to the managing members thereof. All other communications and inquiries must be directed to the General Secretary, Dr. Lassar, Berlin NW., 19 Karlstrasse.

The managing members of the committees on organization of the special sections are as follows:

Anatomy, Hertwig, Berlin W., Maassen Strasse 34; *Physiology and Physiological Chemistry*, du Bois-Reymond, Berlin W., Nene Wilhelm Strasse, 15; *General Pathology and Pathological Anatomy*, Virchow, Berlin W., Schelling Strasse, 10; *Pharmacology*, Liebreich, Berlin N. W., Dorotheen Strasse, 34 a; *Internal Medicine*, Leyden, Berlin W., Thiergarten Strasse, 14; *Diseases of Children*, Henoch, Berlin W., Bellevue Strasse, 8; *Surgery*, V. Bergmann, Berlin N. W., Alexander Ufer, 1; *Obstetrics and Gynecology*, Martin, Berlin N. W., Molkte Strasse, 2; *Neurology and Psychiatry*, Laehr, Berlin-Zehlendorf; *Ophthalmotology*, Schweigger, Berlin N. W., Roon Strasse, 6; *Otology*, Lucas, Berlin W., Lützowplatz, 9; *Laryngology and Rhinology*, B. Fränkel, Berlin N. W., Neustadtische Kirch Strasse, 12; *Dermatology and Syphiligraphy*, Lassar, Berlin, N. W., Carl Strasse, 19; *Diseases of the Teeth*, Bush, Berlin, N. W., Alexander Ufor, 6; *Hygiene*, Pistor, Berlin W.,

v. d. Heyd Strasse, 13; *Medical Geography and Climatology*, A. Hirsch, Berlin W., Potsdamer Strasse, 113; *State Medicine*, Liman, Berlin S. W., Königgrätzer Strasse, 46 a; *Military Hygiene*, Krocker, Berlin W., Madgeburger Platz, 3.

Substitute for Gum Acacia.

The high price of gum acacia has led Trojanowsky, an Austrian chemist, to seek for a substitute, and this he believes may be found in the mucilage of flaxseed. By boiling the seed with water and precipitating the strained decoction with twice its volume of alcohol, he obtained a substance which, after drying, consisted of opaque, yellowish-brown irregular fragments, somewhat brittle, but not easily reduced to powder, dissolving in water to a turbid mucilaginous solution; of this, five grains were sufficient to emulsionize an ounce of cod-liver oil. The large quantity of alcohol, however, required for the precipitation, and the difficulty of drying the adhesive product being such serious objections, further experiments were made, and, by still employing flaxseed as the source of the mucilage, and treating with sulphuric acid, a gum more closely resembling acacia was obtained. His method is to boil one part of flaxseed with eight of dilute sulphuric acid and eight parts of water, until the mixture, which at first thickens, becomes quite fluid; this is then strained through muslin, and to the strained fluid is added four times its volume of strong alcohol, the precipitate being collected on a filter, washed with alcohol, and dried. The gum is in the form of translucent, grayish-brown, brittle fragments, easily pulverized, and without odor or taste, and thirty grains will emulsionize an ounce of cod-liver oil.—*Science*, Jan. 17, 1890.

The Electrical Phenomena of the Human Heart.

A special meeting of the Berlin Physiological Society was called by Professor Dubois-Reymond on December 27, 1889, in order to see a demonstration by Dr. Augustus Waller on man and uninjured animals of the electromotive action accompanying the beat of the heart. Besides the ordinary members of the Society, the leading physicists of Berlin were invited, and Professors Helmholtz and Kundt witnessed the experiments. Dr. Waller employed the capillary electrometer magnified 1,250 times, and thrown on a ground-glass screen in one of the lecture rooms of the Physiological Institute, and demonstrated the electromotive action of the heart on a horse and on a dog. The horse stood in a courtyard near the lecture room; electrodes were attached to his extremities by firm bands, and the wires from the electrodes were passed through the window to the electrometer in the preparation room adjoining the lecture room. The dog stood in the lecture room. In the library of the Institute Professor Dubois-Reymond allowed the demonstration to be made on himself so that the pulsations might be seen directly through the microscope by all the members present.—*British Med. Journal*, Jan 11, 1890.

Phenyl-Urethan.

A new antipyretic, called phenyl-urethan, has been discovered by Giacomini, of Turin. Its dose is about half that of antipyrin, viz., seven or eight grains, and it is claimed to be both trustworthy and efficacious.

Anthrax in a Woman.

At the meeting of the Sheffield Medico-Chirurgical Society, held Dec. 17, and reported in the *Medical Press and Circular*, Jan. 8, 1890, Mr. Benson read notes of a case of anthrax in a woman 50 years old, who was employed in sorting horse-hair tails imported from Siberia. When first seen by him, there was a dark-brown spot on the chin of the size of half a-crown, in the centre of a mass of hard, browny, inflamed tissue, covered with small vesicles containing serous fluid. The inflammation extended beneath the chin, and the neighboring lymphatics were enlarged. It had began three days previously as a small pustule on the chin. There was much prostration, and pain of a burning character, interfering with sleep, the pulse was 120 and the temperature 100°. Two days after Mr. Benson first saw the patient he found it necessary to make a large crucial incision through the mass, which bled freely and afforded great relief. The case was then progressing favorably, the slough separating and showing a healthy granulating surface beneath, the patient having so far recovered her strength as to be able to sit up.

NEWS.

—The deaths in Paris for the week ending Jan. 23, were 585 less than the week before.

—Dr. George M. Wells, Chief Resident Physician of the Philadelphia Hospital, has resigned.

—The estate of Dr. Farnham has given $10,000 to the library fund of the New York Academy of Medicine.

—The City of Atlanta, Ga., has voted to appropriate the sum of $30,000 to establish the Henry A. Grady Hospital.

—Dr. Benjamin Harding Turner, formerly of Philadelphia, died at Haddonfield on Jan. 24, in his 61st year.

—The *St. Louis Polyclinic* has changed its name to the *St. Louis Courier of Medicine*, and has more than doubled its number of reading pages.

—A bill has been introduced in the New Jersey Legislature providing that all poisons sold should not only be duly labelled, but also name the antidote for said poison.

—Dr. Charles B. Goldsborough, surgeon in charge of the United States Marine Hospital, New Orleans, died January 6. Dr. Goldsborough entered the service in 1876.

—A home for aged colored people will be erected by the colored people of Camden and Gloucester Counties, at Woodbury, Gloucester County, N. J., during the present year.

—During a street fight in Sabatha, Kansas, a participant was bitten on one of his fingers by a stranger. The man bitten died on Jan. 25, "exhibiting every symptom of hydrophobia."

—Dr. Abbott, of the Smithsonian Institution at Washington, returned to Zanzibar, from his exploring expedition to Masailland, on Jan. 26. He left his companion, Mr. Carroll, on Mount Kilimanjaro.

—Drs. T. S. Powell and R. C. Ward have sold their interest in the *Southern Medical Record* to Dr. Dan. H. Howell, of Atlanta, Ga. The new Editorial Staff will consist of Drs. A. W. Griggs, Wm. P. Nicolson and Frank O. Stockton.

—Dr. Thomas J. W. Burgess, formerly of the London Asylum for the Insane, has been invited to become the medical superintendent of the New Protestant Hospital for the Insane at Montreal. Dr. Burgess has had a large experience in several of the leading asylums of Ontario.

—Dr. Anton von Troeltsch, of Wurtzburg, the well-known otologist, died on January 11. His text-book on aural surgery is a standard work on the subject and has gone through several editions in Germany, and there have also been at least three editions of its English translation.

—At the annual meeting of the Directors of the Wilkesbarre Hospital, Pennsylvania, held on January 6, it was stated that the endowment fund now amounts to $10,744.77. The balance in treasury at the end of the year was $4,344.73, a gain of nearly three thousand dollars over that of the year previous.

—Dr. Charles Macmillan, Medical Referee of the Pension Bureau, died at his home, in Washington, D. C., Jan. 9. Dr. Macmillan was born in Livingston County, New York. He served as surgeon on the staff of General U. S. Grant, during the war of the Rebellion, and was later made American Consul at Rome.

—It is reported that an epidemic of so-called black-tongue fever has appeared near Morgantown, W. Va. Four members of one family are said to have died from it, and much alarm prevails in the neighborhood. There was an epidemic of what was called black-tongue fever in some parts of the country in the winter of 1842–43. It is generally supposed to be a malignant form of typhoid fever.

—It is reported that there were six cases of genuine typhus fever among the steerage passengers of the ocean steamer *Westernland*. The immigrants have dispersed to various parts of the country; but the New York State Board of Health obtained their destinations from the Castle Garden records, and Health Office Ashmun was notified later that several of the immigrants had settled in Cleveland, Ohio. A diligent search will be instituted to learn whether any of the typhus afflicted patients arrived there.

—The doctors who attended the late King of Portugal during the last few weeks of his illness, presented bills for their services amounting to nearly $100,000. One of them demanded $14,000 for ten visits, another demanded $17,000 for fifteen, while a third thought that $30,000 was not too much to ask for his attendance at eighteen consultations. Eventually, the new King succeeded in effecting a settlement of their claims by means of a lump sum of $60,000. The present infant King has a staff of nine physicians to look after his health.